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A Syllabus of
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A SYLLABUS OF
PSYCHOLOGY.

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PREFACE TO FIRST EDITION.

This Syllabus, prepared primarily for use in my own classes, is published in its present form with the belief that, as emphasizing the more essential aspects of the subject and omitting minor details, it may prove serviceable as (in the stricter sense) a text for the brief course in Psychology practicable in high schools and academies generally. It is also hoped that, as a summary view of the subject, it may prove acceptable as a guide to private students as well.

I am convinced that, for younger pupils especially, brief text-books are essential to anything like clearness and continuity of results. No doubt this necessitates only so much the greater degree of careful preparation on the part of the teacher. But in any case really vital results can be secured only in the degree in which the teacher throws his whole life into his work. It is, above all, through the contagion of his own personal enthusiasm that interest is to be awakened on the part of his pupils; just as it is only through the freshness and validity of his own knowledge of the subject that his pupils can be led to apprehend its fundamental features, and to assimilate the proper method by which they can hope to become

independent inquirers. A working teacher will always have working pupils; and this the more if they are not overwhelmed with text-books rendered wholly unmanageable for them by sheer excess of details. For the more immediate purposes of education by far the greater part of details and illustrative matter can best be given directly in the class—it being assumed that the teacher himself is properly equipped.

The outline here presented has developed directly through work in the school-room during the past seven years. I hope I need hardly say that I have drawn freely upon the works of leading thinkers, both ancient and modern. How far my work shows genuine assimilation and organic reproduction of results, the critical reader will, of course, decide for himself. A more extended text-book of the subject for use in more advanced classes is in preparation on the same general plan, and will, as I hope, be ready for issue within the coming year.

For the convenience of private students a selected list of hand and reference books is added at the end of this Syllabus.

NOTE TO SECOND EDITION.

The favorable reception given to the first edition of this little book leads me to issue the second edition without further change than to add a few brief notes as an appendix.

A SYLLABUS OF PSYCHOLOGY.

I. INTRODUCTION.

In Psychology Mind is considered as an *Individual*; that is, as an *indivisible unit of Energy*. As such it has many *modes* clearly *distinguishable*, but wholly *inseparable* from one another. It is the special function of Psychology as a Science to define the fundamental modes of Mind and to show the necessary relations which those modes sustain one with another. Its task is not to trace individual idiosyncrasies, but rather to outline and account for the essential characteristics of Mind considered in its universal nature or type. And if Psychology takes account of "mental diseases" it does so only that it may the more clearly define the true or normal type.

From its very nature as an indivisible unit of Energy Mind acts always as *one*. All its modes are involved in every act; one or another mode being *predominant* in each act.

The most complex phases are present from the first, but are latest in attaining *maturity* in the course of the unfolding of the individual mind. It is for this latter reason that there is the appearance of serial

development in the unfolding of the several aspects of mind—as if one aspect *began* developing only after the development of another had been *completed*.

In its development Mind presents two strongly contrasted aspects. The first is predominantly Physical and comprises the whole range of *Sensation*. The second is predominantly Spiritual and unfolds in the three mutually inclusive phases of (A) *Intellect*, (B) *Sensibility* and (C) *Will*.

It can here be only remarked in passing that *Consciousness* is the most comprehensive characteristic of mind as a concretely realized unit of Energy. It is, primarily, the *sense of unity and continuity* of the individual life. It is the form of recognition (1) of self as distinguished from external objects, (2) of the identity of the self of present experience with the self of past experiences, and (3) of self *as a self*—*i. e.*, *self-consciousness*. This last form involves all the higher aspects of experience. The more rudimentary forms, for the very reason that they are rudimentary, are non-reflective. Hence in such forms consciousness is directed outward rather than inward. Much passes in its own process of which the individual is unconscious, or only obscurely conscious. For example, a child's consciousness is mainly of outward appearances in their most immediate (*i. e.*, simplest) character. On the other hand, it has no consciousness of the real nature of those outward appearances. Its attitude toward the facts of the world it lives in is

that of "unsuspecting innocence" or "*naïveté*." It is conscious, and yet not conscious *that* it is conscious. It has knowledge; but its knowledge is in every particular only rudimentary in degree and hence requires the most thorough-going revision before it can be counted as knowledge in any degree approaching real adequacy. It is this merely initial aspect of consciousness in contradistinction with consciousness in its fullest measure which has given rise to the riddle of "unconscious consciousness."

II. SENSATION.

As the predominantly physical aspect of mind, Sensation can be brought under scientific review only through the direct co-operation of the two sciences, Physiology and Psychology. Thus the scientific account of Sensation gives rise to, and in its positive aspect constitutes the larger portion of, *Physiological Psychology*. Body, as the organ of mind, presents itself as a legitimate object of study in Psychology. This is, of course, especially true of that part of the bodily organism serving more directly as the mind's instrumentality—*i. e.*, the nervous system; and, above all, of the brain as pre-eminently the organ of mind.

A. NATURE OF SENSATION.—Every Sensation is essentially an act of mind. At the same time it is an act which in its nature is simply a *response* to an immediate physical stimulus; that is, in Sensation

mind is relatively *passive*. Whatever the nature of the external stimulus, there must be an immediate contact of the medium of stimulation with the sense-organ. In which fact there is strong intimation of the view (already entertained by Aristotle) that all the senses are modifications of the sense of *Touch*. This view is, besides, confirmed by the results of modern biological science. The chief senses are Sight, Hearing, Touch, Muscular Sense, Taste, Smell, Temperature. The negative aspect of all sensation is that of *Pain* as due to injury sustained by nervous tissue—especially that of the nerve-fibers.

B. LIMITS OF SENSATION.—Sensation is the rudimentary aspect of the mind. Hence Sensation is not realizable as a “simple” mode of mind, since in its very existence all the other modes are already necessarily implied. Thus Sensation has its limitation in this: that it is the simplest aspect of relation between the mind and an external stimulus. As such it is the initial aspect at once of Intelligence, of Sensibility and of Will.

C. CLASSIFICATION OF THE SENSES.—As the immediate (simplest) relation of the mind to external stimuli, sensation presents both an *objective* and a *subjective* aspect. And as this relation between the mind and external stimuli involves the intermediation of the bodily organism, sensation also necessarily presents a *physiological* aspect.

Thus the senses are found to present several special

groups of characteristics according as they are considered in respect of the physical stimulus, the psychical response, or the physiological medium; and hence they are to be grouped into classes with reference (1) to their objective aspect, (2) to their subjective aspect, and (3) to their physiological aspect.

1. Considered in their objective aspect, the senses are seen to be either (a) Geometrical—*i. e.*, media through which consciousness of space-relations is awakened; or (b) non-geometrical—*i. e.*, as possessing little or no suggestion of such relations.

a. The *Geometrical Senses* are (a) Sight, (β) Touch, and (γ) the Muscular Sense. The first is the medium for perception of form and color; the second for perception of form and texture, the third for perception of states of matter and of motion (the latter subjectively experienced as “sense of motion;” as in movement of the limbs, etc.)

b. The *Non-Geometrical Senses* are (a) Hearing, (β) Taste, (γ) Smell, (δ) Temperature. In all these the geometrical character of the stimulus is broken up before the psychical response, properly speaking, begins.

2. Considered in their subjective aspect, the senses are either (a) *Intellectual*—*i. e.*, media through which there is awakened consciousness of the world in all its characteristics, external and internal; or (b) *Organic*—*i. e.*, media through which there is awakened

consciousness of physiological states of the individual as referred directly or indirectly to external stimuli.

a. The *Intellectual* senses are (α) Sight, (β) Hearing, (γ) Touch and (δ) the Muscular Sense.

All these senses are involved in the minutest and most commonplace, as well as in the most important, details of life. The first two are involved in the higher range of Art and Science, supplementing one another in the most complex ways in both these spheres.

Sight, as pre-eminently the geometrical sense, is constantly called into use as absolutely indispensable to science in its widest range as well as to all the arts of visible representation; while hearing is the medium of all spoken language on the one hand and of the art of music on the other; in which latter it shows its subtlest and most thoroughly subjective character. Both Touch and the Muscular Sense have a higher value intellectually than is commonly assigned them. Touch is constantly exercised to correct the impressions of form as developed through the sense of vision; while the Muscular Sense is the sense through which the mind attains full conviction of the objective reality of the sensuous world.

b. *The Organic Senses* are (α) Taste, (β) Smell, and (γ) the sense of Temperature. (Other more or less vague forms of sensation are to be included as organic—as aspects of the *general sense-consciousness*, diffused feeling, *Gemeingefuehl*.)

Smell and taste are also otherwise known as "Senses of Nutrition."

3. Considered in their physiological aspect the senses are either (a) Mechanical—*i. e.*, senses in which the response is to a simply mechanical excitation of the nerve-ends; or (b) Chemical—*i. e.*, senses in which the response is to an actual chemical change produced by the stimulus in the end-organs of the nerves.

a. The *Mechanical* senses are (α) Hearing, (β) Touch, (γ) the Muscular sense and (δ) the Temperature sense.

b. The *Chemical* senses are (α) Sight, (β) Taste, and (γ) Smell.

It is at once evident that to Psychology in its higher phases the subjective aspect of sensation is the most important, and next to this the objective; while the physiological aspect is of subordinate import. Nevertheless even the most exalted phases of mind necessarily involve physiological functions. Only, the more explicitly the higher phases of the mind are developed, by so much the more does the sense-aspect show itself as limited to a relatively narrow sphere and as realizing its highest values precisely then when most thoroughly subordinated to the highest functions of mind. So that, even to ascertain the highest values of sensation, we must turn to the study of those higher modes of mind known as Spiritual in contrast with its sensuous or Physical modes.

III. THE INTELLECT.

The predominantly spiritual aspect of mind unfolds its highly complex character in the completely inter-fused, though clearly distinguishable, modes known as Intellect, Sensibility and Will.

The development of all science depends upon the predominance of the mode of mind named *Intellect*. For this reason it is desirable to begin the development of the science of mind in its predominantly spiritual phase, with an analysis of this special aspect of mental activity.

Sensation is predominantly physical; and yet, in order really to *be* sensation, it must also present a psychical aspect. This psychical aspect appears primarily as the simple function of the physical. But further investigation (embodied in the whole of modern biological science) discovers the universal law that while in its immediate character structure limits function, yet essentially and in the total history of organisms function determines structure. So that the structural form is but the organic embodiment—the concrete expression—of the functional activity. The more complex the organism the more elaborate the functional process presupposed as necessary to account for the structural form.

Applying this in the present connection, it appears that in truth the human body is but the embodiment—the concrete expression—of the human mind

(heredity being allowed for). The brain is, doubtless, the more immediate organ of the mind; the entire body is still none the less, *as a whole*, organic to the mind.

The psychic life involved in and constituting the essential aspect of sensation becomes explicit as intellectual activity, first of all in *Perception*; *i. e.*, in those psychical experiences in which there is actual *presentation* of objects to the mind. With the progressive unfolding of mental power the mind is able to revive the modes thus established. That is, through the exercise of its own power the mind is able at length to bring about a *Re-presentation* of objects through the objective aspects of modes established in the mind itself in the process of Perception. But there is involved in this re-presentative process the recognition of *relations* as between objects; and relations can be apprehended only in *Thought*.

The Intellect thus presents as its fundamental modes: *Perception*, *Re-presentation* and *Thought*.

There is to be noted here the significant fact that while the lower and more generalized aspects of life are due directly to heredity, and (in vertebrates) are organically unfolded at birth into fairly perfected form in the spinal cord as their central organ; the more individualized and higher aspects of life have their organic development in the brain. Whence it is by no means surprising that at birth this organ is very immature and attains full structural development only through the

higher functions of individualized life—requiring, in fact, for the attainment of full maturity at least twice the time necessary for the complete unfolding of the bodily organism in its other aspects. The more individualized the structure the more completely does its actual determination—that is, its realization into full efficiency—depend upon individualized functions.

We have next to consider the special aspects of the mind considered as Intelligence.

A. PERCEPTION is to be considered: (1) as *Process*; (2) as *Product*.

1. As *Process* it begins in Sensation, and consists in the immediate reference of psychic states to sensuous objects.

a. The character of the perception in any given case depends upon that of the sensation, as this in turn depends upon the character of the stimulus which the sense-organ is suited to transmit.

b. The sense which presents in completest form both the subjective and the objective aspects of sensation is that of *vision*. For this reason it is taken as the type, and from it the analysis of sensation in its more general character is developed.

This assumed, the *first* phase of every sensation is simple consciousness of change. The *second* is the expression of the inherent demand of the mind for *cause*. It consists in the gathering of attention upon the fact of change experienced in the mind. The *third* phase consists in turning the attention in the di-

rection from which the stimulus comes. The *fourth*, in distinguishing one portion of space from surrounding space (seeing the object). The *fifth*, in distinguishing the object from one's self—*i. e.*, recognizing it as *one's own* object, and yet as an *object*.

c. In the last two phases, especially, there is evidently implicit an act of discrimination or judgment (thought). Whence it appears that not even the simplest act of perception can take place without involving in some degree the highest mode of intelligence—*i. e.*, Thought.

2. The *Product* of perception is at once both subjective and objective, and is called a *Percept*.

a. As subjective the Percept is a mode of the mind considered as a unit of energy and is limited to a single characteristic, as color or sound. As objective, it is the seeming renewed presence of the object, though the latter be no longer within view. This seeming presence of the object is called the *Image*. Both the subjective mode and its objective aspect, the Image, are necessary and complementary phases of the Percept. (In its fullest meaning the term "image" is here used technically for the objective aspect of any and every Percept developed through any one of the senses).

b. Even of the objective aspect of Percepts, by far the greater part is still a subjective creation. Color, sound, odor, flavor, warmth or cold—all these are subjective products. They are aspects of the

“Image,” indeed, and hence belong to the objective aspect of the percept. But the percept as a whole is still a psychical product, having no real resemblance to the outer object save in the single aspect of *shape*. (In vision the geometrical relations involved in the stimulus are preserved for the retina by passing through the *circular* opening of the Iris; just as in touch those relations are preserved for the mind by the simultaneous sensations of *direct contact* through definitely localized end-organs of this sense.) Thus, even in this simplest phase of its activity, mind shows itself possessed of creative power in marvelous degree.

B. REPRESENTATION.—But a percept really becomes matured as such only through successive stages. An object must be seen many times before it is *rightly* seen. And *repetition* means *Retention*. That there can be any consciousness of a second experience *as second* there must be retained in consciousness the product of that experience which, in contrast with the present, is recognized as former or *first*.

Repetition, besides, requires only that the object presented the second (or thousandth) time be the same *in kind*. Each act of Perception is, doubtless, of a particular thing only. And yet so much of Thought is present in perception that the *typical form* is after all what is really *seen*. (Further on will be seen the deep-reaching significance of this fact in the process of *naming* and classifying.)

1. *Involuntary Reproduction of Percepts.* Any given Act of Perception, then, is always strictly of a given particular object. On the other hand, the *developed Percept* is generic and universal.

A percept is developed through repeated acts of perception into clearness and accuracy and adequacy. And for each of those repeated acts of Perception, through which are brought about the correction and deepening of a *percept* already partially formed in the mind, a new act of perception of similar character is primarily the necessary occasion. Such revival of a Percept constitutes the simplest phase of Retention; and in this form it is known as simple *Representation*. We have here, in fact, precisely that mode of Representation known as *Involuntary Reproduction* of Percepts. And this is, of course, succeeded naturally by the *voluntary* phase of activity within this same sphere. That is, with exercise of power there is increase of power. And such increase of power on the part of a living unit, as we shall see further on, tends inevitably toward *self-activity*; in other words, toward the voluntary or independent exercise of power. And since this first general aspect of voluntary Representation is still exclusively occupied with imagery, it is properly termed *Imagination*.

(Involuntary reproduction of percepts, as the simplest aspect of Retention, is of interest chiefly because of its being the transition from simple Perception to the sphere of Imagination properly speaking.)

2. *Imagination.* With every repetition of an act of perception the *percept* as a mode of the mind becomes more fully developed. This is one aspect in the maturing of the mind as a unit of energy. And with this approximation toward maturity the mind at length becomes able in increasing degree to reproduce its own modes in conscious degree *at will*. That is, the voluntary aspect of Representation is attained. Or, again, in Perception the object is *presented* to the mind. As percepts are matured through repetition the object comes to be *re-presented* through the image—*i. e.*, through the objective phase of the Percept. And this process attains at length a voluntary character. In other words the mind becomes increasingly able to control its own modes as those modes mature. Or rather, the proof of increasing maturity consists here precisely in the self-activity manifested in the greater readiness and ease with which percepts are reproduced at will.

It is this control of imagery, including not merely the voluntary revival of Percepts, but also, and more especially, the modification and new creation of *Images* that is properly termed *Imagination*.

Of this there are two chief aspects—(a) the *Æsthetic*, and (b) the *Scientific*.

a. *Æsthetic Phase. a.* Already in childhood the *æsthetic* phase of *Imagination* attains a remarkable development. The percepts of the child-mind are vivid, but lacking in accuracy and in adequacy.

Imperfectly developed, they easily undergo modification. And this either with or without choice on the part of the child. Hence the imagery of the child-mind assumes any character, according to the immediately prevailing mood of the child, and altogether regardless of the laws prevailing in the actual outer world.

Unrestrained by any consciousness of such laws the child-mind creates a whole world of imagery which is in great degree arbitrary and subjective. It is only by continuous collision with the actual objective world that the thought-aspect of the child-mind is stimulated into concrete development. And this aspect it is which, more and more completely fused with the processes of the Imagination, renders the products of the Imagination more *rational*—*i. e.*, more and more harmonious with the actual objective world.

Childish Fancy is the Idealism of the childhood stage of mind. Experience—chiefly in the negative form of disappointment—reduces this more and more to the prose of Realism.

It is the childhood stage in the growth of the race that gives rise to myths—the first form of interpretation of the World in its relation to man as a distinctively spiritual being.

β. With the gradual adjustment of the mind of the race, and of the mind of the individual through the race, to the World in its more rational character

the conceptions constituting the central element in products of the Imagination become more consistent. And this in turn gives to the products themselves a more rhythmic character. It is upon this interfusion of the thought-element with the sensuous element that the rank of art-works as products of the Imagination chiefly depends. It accounts for the difference between a Chinese idol and a Phidian Zeus; between a nursery tale and a *Divina Comedia*. It is the clew leading up out of the crude Idealism of childhood, through the immediate facts of the "Real" World, to the ultimate types of that Idealism which is possible only to the rationally matured mind.

It is in seizing and adequately representing these ultimate, eternal types of Beauty in their sensuous aspects that Imagination proves its highest creative power.

(1) The simplest phase in the process of the imagination is that of the *voluntary reproduction* of Percepts. This always implies a purpose, an Ideal, consciously or unconsciously entertained. In its very nature the mind, as already indicated, demands *Perfection*.

(It is for Metaphysics rather than for Psychology to account for this demand, and to explain more fully what Perfection in its ultimate nature really is.)

As Imagination the mind demands perfection of *sensuous form*. In simple voluntary reproduction of percepts this appears in the selection spontaneously

made as between one and another percept or group of percepts.

(2) But this very selection tends not merely to render the most "perfect" percepts more vivid as modes of the mind, but also to fuse the finest objective characteristics of the finest percepts in the whole range of a given type into *one typically perfect Image*. So that voluntary Reproduction of Images already involves the process which, in its explicit phase, is properly called *Creative Imagination*. Both process and product must vary within the range of each of the special senses. But only for the senses of Sight and Hearing can the product ever really rise to the rank of an art-work.

b. *Scientific Phase.* a. *The Scientific* phase of Imagination appears on first view to be confined mainly to the simple reproductive aspect—the purpose (Ideal) here being to attain the highest possible degree of clearness, accuracy and adequacy in the representation of typical forms as they actually occur in nature. Indeed, in every phase of science, having reference to space forms, this mode of Imagination is constantly called into play; while in this sphere *creative* Imagination is limited rather to invention (*e. g.*, developing forms of apparatus or machinery) with a view to satisfying either a scientific purpose or an immediately "practical" human need.

β. But, as the thought-element of the mind becomes explicit, *relations* are apprehended, and become the

chief "object" of attention; and relations can be seized and represented only in forms specially adapted to such purpose.

Now, as a *relation* can be seized only in *thought*, so it can be *represented* only through a *sign*. And this sign must of necessity be produced (created) by the mind itself. Again, the whole range of signs through which Thought is represented constitutes *Language*. And the sensuous forms of Language—consisting of the spoken sounds or of the written signs of such sounds—are in their entire compass nothing else than a complex product of the Imagination.

Thus we have here a special and highly advanced phase of creative Imagination. It is, indeed, subordinated to the exclusive purpose of creating signs for the representation of Thought and hence may very appropriately be given the name of the *Sign-Creating Imagination*. But the subtlety of its function shows the high rank to which Imagination here attains.

3. *Memory*. But the complexity of Thought necessitates an immense range both in number and in variety of such signs. And this in turn can be realized only through a corresponding development of the power of *Retention*. Not only so, but here the power of Retention assumes a new and highly significant character. In the spheres of Representation already considered, Retention is everywhere necessarily implied; but everywhere also, in those spheres the retention is of modes of mind the objective aspects of

which are *images*. In the sphere of Representation now reached the real "object" of attention is a quality or group of qualities seen in some special *relation*; and a relation can be seized only in *thought*; and thought can be adequately expressed only in *words*.

Here, then, the retention is of *words* and of the modes of Thought represented in and through the words. This phase of Retention constitutes by far the most important sphere of activity for what is commonly known as *Memory*.

And because of the importance of having a term the use of which shall constantly emphasize this aspect of Retention in contrast with those aspects in which imagery constitutes the invariable form of Representation, it is desirable, in Psychology especially, to restrict the use of the term "Memory" to that aspect of Retention in which the form of Representation consists of words.

a. *Word-Memory*. Thus considered, Memory presents its simplest phase in the acquisition of Language, which is also simply the objective form of the process of developing thought. Here as elsewhere Life consists in, and is developed through successive responses to, stimuli from what for the individual is primarily a literally *external* world. The child begins to learn Language by hearing "words" (groups of sounds) in given relations. Only as he comes to apprehend in its proper connection

a given group of sounds does such group of sounds become an actual word *for him*.

Only by slow degrees, through thousand-fold repetition, is this last result actually attained; and with this comes the impulse to actually speak—to produce *articulate* sound, just as the rudimentary phase of thought (present from the very outset of the individual life) is vaguely represented in *inarticulate* sound.

(Of the highest practical importance in the actual development of language on the part of the individual, as well as of special interest in science, is the nervous process consisting of the training of the organ of hearing, the establishment of practical connection between this organ and the brain, especially with that part of the cerebral cortex devoted to speech, and finally the development of actual communication between this center and the vocal organs. It is to be noted, too, that this physiological order coincides with the only conceivable psychical order in the acquisition of Language by the individual.)

First of all, then, the sensuous element, consisting of the spoken word, serves as the medium through which the thought-element, properly speaking, is developed in the individual mind. And in this initial stage the thought-element can be seized only as the sensuous element of Language is actually presented to the mind through the sense of Hearing (and, later, through the sense of vision in learning the written form of Language).

Here, then, we have a phase of Memory that may appropriately be termed *Word-Memory*.

b. *Reproductive Memory*. But with the continuance of the psychical activity here involved, the thought-element becomes so far matured and so completely interfused with the sensuous element of the corresponding words, that the mind is able independently to reproduce the thought-element, and with this the word as its objective, organic form. That is, we have here the special phase of Retention properly called *Reproductive Memory*.

c. *Mechanical Memory*. A further stage of advancement is reached when the thought-element has become so far enriched in the mind of the individual as to require a more or less extended group of words from which to choose in order to express this or that particular shade of meaning; the latter depending upon the special relation emphasized in any given case. Here so mature is the thought-element and so complete is the "command of Language," that, the theme being given, thought develops with perfect freedom and the language, serving as the exact embodiment of the thought, is made use of without conscious effort. Hence the phase of Retention here involved is appropriately named *Mechanical Memory*.

Its physiological aspect is a species of *automatic action* as the organic result of long-continued nervous processes.

In this highest form of memory we have the matured appliances and aptitudes for the highest forms of intellectual activity—namely, the various forms of Thought.

C. THOUGHT. Some degree of anticipation in respect of this part of the subject has been altogether unavoidable even in the summary view just completed of Imagination and Memory. It can not be too strongly emphasized that in the actual development of the mind, all its modes are present at every stage. It is, let us repeat, because the more complex phases attain, and can only attain, explicit development at correspondingly later stages in the entire process of mental growth that there is any appearance of one phase succeeding another in that process.

On the other hand (to confine ourselves now to the sphere of Intelligence), Thought is, as we have seen, already implicit in the very simplest act of perception; just as it is also implicit, though in far more complex character, in Imagination; while it is even presupposed as in greater or less degree an explicitly developed mode of mind throughout the whole range of Memory, properly speaking.

It is Thought in this explicit character that we have next to consider.

1. *Conception*.—An act of perception consists in the immediate response of the mind to some external stimulus upon the organ of one or another of the

senses. An act of the (creative) Imagination consists in the fusing of the objective characteristics of many percepts into one universal or typical Image.

a. *Process of Conception.*—An act of thought of the simplest degree consists (as we have next to note) in the seizing together in their unity a more or less complex group of qualities as constituting one object. But the actual performance of such act presupposes a degree of mental growth which is itself attainable only through a more or less extended series of efforts; that is, there must have been presented in succession to the mind through one or more of the senses *many objects*, each of which still gave rise to essentially the *same group of psychical reactions*.

Along with this there must have been frequent repetitions of a given sound or group of sounds in the hearing of the individual and in such way as to bring this sound or group of sounds into explicit connection in his mind with the objects successively apprehended. The identity of the sound or group of sounds in each recurring experience of this reaction must help to emphasize in his mind the identity of the characteristics constituting any one object of a given series with those constituting any other object of the same series; just as, on the other hand, the sound or group of sounds must come at length to be fused in his mind with the group of characteristics thus gradually seized together in their unity and explicitly

recognized as constituting the object. It is then that for the first time the sound or group of sounds constitutes a word *for him*.

When this has actually taken place in any given mind, such mind has performed an act of *Conception*. That is, it has seized together in their unity a given group of characteristics, which are found to constitute whatever is essential in each one of an indefinitely extended series of objects, which objects are thus seen to be identical with one another in *kind or type*.

b. *Product of Conception*.—But this Process has for its Product a permanent mode of mind; and this mode is properly called a *Concept*. And the objective form of the concept is just that sound or group of sounds which, as we have seen, becomes for the individual a *word* in the proper sense of the term only when it attains in his mind precisely this character: that it is the outer, organic form of the concept.

(The formation of more abstract concepts, as that of color, or of form, or of magnitude, or of weight, or of quality, etc., can here be no more than merely mentioned.)

It is to be noted now that while a *Percept* has for its subjective aspect a *sensuous* element (as color, or sound, or odor), the objective form of which is an "*Image*;" a *Concept* has for its subjective aspect a *thought*-element, the only adequate objective form of which is a *word*.

Such, in brief, is the distinction between the products of these two widely different, and yet closely allied, modes of intelligence.

2. *Understanding*.—We have next to note that in the very process of Conception there is involved the recognition of identity in characteristics as between one and another of a series of objects. For this reason the same name can be rightly applied to different objects. Naming is, in truth, a process of identifying—of seeing the one in the many. That is, again, to assign the same name to different objects is to see each particular object of a given series as universal in its essential, integral character. It is to see in that object all those fundamental characteristics constituting each of the other objects of the series. It is to see that in such series the particular objects are really different from one another only in an external or formal sense; that essentially, in their fundamental nature, they are identical.

Now this entire process of ranging objects in series according to their essential characteristics, and *naming* them accordingly, is the process of *classification*. It *begins*, indeed, in the most superficial noting of some external mark specially striking to the sensuous aspect of mind—as in the naming of the “cat-bird.” In the field of science, on the other hand, it culminates in the recognition of identities in organic structure as expressive of identities in functional activity—for example, in tracing the class “Phenogam,” or the class “Vertebrate.”

It is to be added that when the fundamental characteristics are so presented to us that we recognize the typical nature of any given object, and thus, also, the typical nature of the class to which it belongs, we indicate our mental adjustment to the given fact by the expression: "I understand." It is as if the mind felt its own essential subjective unity to be emphasized in each act of seizing together in their unity the group of characteristics constituting an object. Hence, for the mode of thought here indicated by its leading characteristic no more appropriate designation can be found than: "*Understanding*"—a term which literally affirms the subjective unity of the mind in every conscious objective reference. For example, if I say (think) "lily," there is conscious reference to an *object* which is a *unit*. The significance of such process is twofold. On the one hand attention is given chiefly to the inseparable, though distinguishable, qualities which in their *unity* constitute the *one* given object. On the other hand, *many* objects are seen to be each a repetition of this same unity of characteristics. Each, then, is *essentially* the same as any other of the series. Hence the same designation applies to each and all alike. The whole series thus comes to be seen in a larger unity called a *class*. But again, as the power able to seize these various aspects of unity, the mind can not but feel in increasing degree *its own* unity and self-identity with each repetition of such experience.

Let us note now, that in what immediately precedes, there emerges into explicit form that deep-reaching significance already noticed as inherent even in the immediate product of Perception.

(In this whole sphere, too, as in those preceding, there is constantly required, and here brought into more explicit form, as a necessary condition of accuracy and adequacy of result, the special mode of mental activity known as *Attention*, the more developed form of which makes its appearance in this sphere as *Observation*. And this, especially in the field of the Sciences of Observation, is simply Perception subordinated to Thought.)

3. *Judgment*.—But this very process of Identification can attain explicit form only in so far as it involves the critical mode of mind; and it can attain trustworthy results only in so far as it is completely interfused with that mode.

It is easy to see identities. Primitive man saw them everywhere and filled the world with myths—often beautifully rational, but also often monstrously irrational. If Science, if Art in its highest form, is to be attained it can be only through a careful noting of *differences* as well as of points of identity. In this way alone can the classifications of science be expected to coincide with the types of the actual world. In no other way can the forms of art be restricted to their proper function of unfolding into rhythmic,

sensuous expression the fundamental aspects of Truth inherent in and constituting the essence of all the forms of the Real World.

Understanding, then, as the mode of thought by which identities are recognized, is still a powerless abstraction except in so far as it is interfused with the complementary mode of thought—*i. e.*, the mode by which the natural lines of distinction are traced out between individual and individual, between species and species.

Nature itself is a vast process of *differentiation*. The growth of mind consists in its own self-differentiation, in its own self-definition. And the normal aspect of this latter process in the sphere of Thought is the unfolding of definitions in the mind which conform as precisely and as adequately as possible to the definitions or *thought-forms* concretely unfolded in the actual objects of the world constituting the mind's environment. In the process of nature a progressive scission takes place in the universal Substance and a particular form—a rose—unfolds as the concrete embodiment of a thought-form constituting a generic character.

To such fact the relatively undifferentiated mind responds by a similar progressive scission within its own being; and when in any given case this process is fairly matured the mind is said to have "arrived at" (it has simply developed within itself) a *decision*

concerning the fact. It has come to *know* the fact. In other words, it has adjusted its own subjective mode to the given form of objective reality.

It has now recognized, not merely a similarity; it has also recognized difference. And difference is *limitation of identity*.

Now this tracing of differences as they inhere in the nature of things is the exercise of thought in that special mode properly named *Judgment*; and it is evident that in no other way than through the more or less complete interfusion of Understanding and Judgment can a really rational or organic view of the world be attained.

(The following further points can here be brought together only by way of enumeration: (1) All thought is a tracing of relations, whether of likeness or of difference; (2) Every relation presupposes two or more objects—each representing a more or less extended class; (3) In the mind of the individual each “*object*” is a *concept*; (4) Thinking, then, is really a comparison of concepts; (5) The objective form of a concept is a word, and thus (6) the objective form of a thought—whether the relation seized be that of likeness or of difference—must be a proposition.)

4. *Reason*.—But, even so, Understanding and Judgment appear as in unstable equilibrium. However far they may presuppose one another, yet, as contrasted modes of mind, they still appear as in

more or less positive conflict. Now likeness, and now difference, is the emphasized aspect of the relations apprehended. Whence it is evident that unless there is a further and higher mode of Thought than either Understanding or Judgment, there can be no point of rest for the mind in this highest sphere of Intelligence.

And yet already, even in the simpler phases of Intelligence, we have noticed that in the very nature of the mind there is an inherent demand for *Perfection*. In the sensuous phase this demand is satisfied when the psychical response is to a nervous excitation which is in full unison with the external stimulus. In the sphere of Thought the demand for Perfection is satisfied only when there is recognized a complete interfusion of relations of Likeness and of Difference in a more or less complex unit presenting one or another degree of self-sufficing wholeness—for example: a sphere (planet), a cube (crystal), a cell (organic unit), a rose (organism), a soul (conscious unit of Energy), God (the absolute, self-knowing, creative, all-inclusive, all-unfolding Substance.)

As such *Totality* necessarily involves both *Likeness* and *Difference* in concrete interfusion it is evident that the psychical act of seizing such Totality can be an act neither of the Understanding as such nor of Judgment as such; but rather that it must be an act consisting of a mode of Thought involving both these as its subordinate factors.

Something of this seizure of Totality is foreshadowed in Conception, each act of which, as already pointed out, is the seizing-together in their *unity* a given group of characteristics as constituting one object. So also in the explicit process of the Understanding in Classification there is the seizing-together of many objects as each embodying *one* universal or typical form; while in Judgment the precise unity of such typical form is emphasized by the clear apprehension of its limits (both external and internal).

But when Likeness and Difference are clearly recognized as mutually complementary in any possible concrete unit so that the unit is seen to be *of necessity* precisely what it is, neither more nor less, then *Totality* is fairly apprehended and the unit may be said to be fairly *comprehended*.

And this comprehension of a unit in its necessary complementary relations of Likeness and Difference is precisely the process known as *Reasoning*; and the mode of Thought which is alone adequate to such process is properly called *Reason*.

Note further that as a given (explicit) act of Judgment consists in a comparison of concepts and has for its organic form a Proposition; so any given (explicit) act of Reason consists in a comparison of specific "judgments," and has its organic form in a syllogism. This may be extended to any degree of elaboration in the process of *Reasoning* or *Inference*.

(In its method Psychology presupposes Logic, just as in its subject-matter Logic presupposes Psychology. As the natural history of mind Psychology has a wider range than Logic, which is devoted exclusively to tracing out the fundamental method of Thought in its fully matured degree. As developing the necessary forms of Thought, and hence as developing the essential aspects of the method of all science, Logic is of wider scope than Psychology, which is limited in its range to applying the universal method of Logic in one single department of knowledge.)

It remains to be noted as self-evident that with Reason, as the mode of mind through which Totality is apprehended and things are comprehended, the culmination of the phase of mind known as Intelligence is attained once for all.

A moment's reflection leads to this further remark: That in every phase or degree of intelligence there is necessarily implied some measure of Feeling or *Sensibility*. Whatever we are related to in consciousness is either attractive or repellent. We experience either desire or aversion toward it. We are led, therefore, to consider next the nature of this special mode of mind which is seen to be a necessary accompaniment of every act of our Intelligence.

IV. SENSIBILITY.

As a preliminary definition it may be said that Sensibility is the passive form of Consciousness—the

simple "sense" of harmony or of contradiction as between the individual mind and its environment.

The special character of Sensibility depends upon the nature of the relations in which the individual mind is involved. These relations are (A) in their objective aspect *Physical*, in their subjective aspect *organic*; (B) in their objective aspect *Social*, in their subjective aspect *Individual*; (C) in their objective aspect *Cosmic*, in their subjective aspect *Personal*.

We have thus three special phases of sensibility. The first of these is spontaneous, and is evidently limited to the sensuous aspect of life. The second is already more or less deliberative, and is developed through the institutional or "practical" aspect of life; the third is specifically contemplative, and is unfolded mainly through what is known, in the wider sense of the term, as the *Spiritual* aspect of life.

Here again the absolute unity of mind is to be emphasized. In the present part of our summary view we have to consider, not *successive stages*, but only *special aspects* of Sensibility—*distinguishable* but *wholly inseparable*. As with the various phases of Intelligence, so here, the appearance of serial development is due to the fact that the more complex the phase the greater the extent of time necessary to its complete unfolding. Nor is it to be forgotten that Intelligence and Sensibility are also mutually complementary and completely interfused phases of consciousness.

A. SENSUOUS ASPECT OF SENSIBILITY. The phase of Sensibility involved in the sensuous aspect of life is primarily that of the *agreeable* or the *disagreeable*. According as the physical stimulus acts upon the organism so as to excite rhythmic responses or the reverse—raising or lowering the “tone” of the nervous system—the aspect of the response consisting of feeling will be in one or another degree pleasurable or painful.

Each of the senses constitutes a medium for an extended range of experiences of the agreeable or the reverse. Here, too, the character of the experience will of course depend upon the nature of the particular sense. At one extreme are the senses of nutrition (smell and taste) with their predominantly physiological character. At the other extreme are the senses of Sight and Hearing with their predominantly psychical character. The latter senses, indeed, serve as media for experiences of the most refined nature, extending into the higher degrees of Sensibility.

The psychical response to the stimulus from the environment is here, indeed (in this elementary phase of Sensibility), mainly of the reflex type. That is, the response is primarily *organic*, and is to be explained biologically as due to the complex, highly endowed structural form which has its origin in the experience of the race.

But here, too, increased realization of individual life depends upon the continuous adjustment of the individual living unit to its environment. The more perfect the adjustment, the more positive is the connection between the unit and its environment; and hence, by so much the greater will be that pleasurable feeling which is but the subjective form of unison between self and the environment upon which the growth of self depends—the “self” attaining explicit realization, indeed, only in the living unit known as human.

One of the most striking forms in which Sensibility of the simpler degree makes its appearance is that of the pleasure of mere living in which the instinct of self-preservation is so closely involved. Inseparable from this egoistic sentiment, too, as its complementary form, is the equally spontaneous (organic) pleasure in the lives of others, and the efforts for the preservation of those lives, to which such pleasurable phase of Sensibility leads.

Thus, even in this simple, rudimentary phase of Sensibility, the interdependence of the egoistic and the altruistic sentiments is clearly manifest. Nevertheless, in this sphere each experience of pleasure or of pain is more or less isolated and may very well be followed by an experience of directly opposite character. This is conspicuously the case in child-life, where sudden and violent transitions in feeling are to be expected as a matter of course. And this the more for the reason that the intellectual aspect of child-life

is confined chiefly, in the *first* place, to indiscriminate perception—the response here taking place with equal readiness to any and every stimulus, so that any given series of experiences will be altogether heterogeneous, and hence conspicuously lacking in coherence—and, in the *second* place, to the mainly capricious aspect of imagination known as childish fancy.

But all agreeable experiences, in the fact that they *are agreeable*, possess *one common quality*. And the greater the range and variety of such experiences the more do they tend to fuse into a more or less continuous state. From being broken up into a series of more or less isolated and contradictory moods the mind attains a character of *continuity in feeling*. It is this which leads over (by simple development) into the next more adequate phase of Sensibility. It is easy to see, too, that this elevating and rationalizing of Sensibility will depend largely upon the intellectual habit developed by the individual. Habitual dwelling upon rational sensuous forms is one essential condition of cultivating a genuinely rhythmic or normal state of feeling within the limits of sensuous life.

B. PRACTICAL ASPECT OF SENSIBILITY.—In the institutional aspect of life the experience of the individual takes on a predominantly *human* character. In the relations of home, of school, of society in general, the Individual finds in manifold forms and in increasing degree substantial grounds

of security. His associations are more or less uniform. Stimulus and Encouragement are constantly extended to him. The great mass of conditions constituting his immediate actual environment (especially the social world in its entire compass) exhibits more or less explicit and consistent organic unity. Such, at least, is the case in the normal life of the individual.

Whence the sentiment of the Individual deepens into more and more clearly defined form and is increasingly characterized by consistency and continuity. It is this aspect of Sensibility which in its most general character is properly named *Contentment*.

But also this phase of Sensibility depends largely for its fullest development upon the general (intellectual) power of Representation exercised by the Individual himself. To revive a percept is not merely to strengthen the percept in its character of an intellectual product. It is also to deepen and render more vivid the aspect of feeling which is already necessarily involved in the process of perception, and which thus tends inevitably to recur along with each reproduction of the percept.

Thus as the intellectual process of Representation develops into the voluntary degree, and especially as Imagination attains maturity in its normal *creative* character, the Sentiment of Contentment becomes correspondingly strengthened and enriched; just as, on the other hand, the abnormal activity of the intellect-

ual power of Representation can not but involve contradiction; and with this there develops inevitably that *sense* of contradiction which is known as *discontent*.

It is in this sphere especially that we have that wide range of pleasurable experiences which, in their character of Sensibility, are grouped under the phrase: "Sentiment of the Beautiful." And when this becomes the leading motive the Intelligence and the Will are brought into play in the creation of works of art as well as in the deliberate contemplation of natural beauty.

Here, too, above all, is the sphere of the most complex interplay of the *egoistic* and the *altruistic* sentiments, such as self-respect, love of friends, love of home, love of country, delight in the rhythm of social, of political and (on the human side) of religious life, both as actually realized and as conceivably realizable.

But this very process of enriching and refining Sensibility through the fuller development of the Imagination is already an *idealizing* process, and as such brings us to the consideration of the next higher phase of Sensibility.

C. SPIRITUAL ASPECT OF SENSIBILITY. This next higher phase, as already intimated, is unfolded mainly through the contemplative or reflective aspect of life. In the whole course of what is ordinarily called Education, there are constantly emphasized in the mind of the Individual the universal

and permanent aspects of the world. Power to discriminate between the vanishing and the abiding in all objects of interest is thus steadily cultivated. So that on every hand proofs multiply for the Individual, that beneath all the vanishing forms of the world about him, there is an assured basis of unalterable Law. And, as this conviction grows clearer, the sentiment of contentment deepens into a profound sense of security.

But the refined pleasure thus experienced tends to stimulate the contemplative mood in still further degree. Imagination is called into play to picture, as thought is called into active exercise to demonstrate, the existence of a Perfect World; and this especially in respect of the spiritual and abiding interests of man. To know the Law of Gravity gives substantial ground for the sense of physical security. Knowing the divine Law of the identity in nature of all minds, and hence of the identity as between the divine and the human nature, constitutes the basis for an absolute sense of the spiritual security of the Individual.

The sense of harmony between the Individual and the rationally ordered physical world is simple *comfort*. The sense of harmony between the Individual and the established order of the social world is called *peace*. The sense of harmony between the Individual and the eternal order of the divinely constituted spiritual world is, in the proper sense of the term, *Happiness*.

Or it may be said that Sensibility in the sphere of sensuous life bears the normal character of pleasure; while in the sphere of social life it may rise to the rank of joy; and that in the sphere of the higher spiritual life it attains the character of serenity. It is in this latter sphere of the relations of the Individual to his environment, in its character of the universal or cosmic order, that the sentiment of sublimity on the one hand, and especially the religious phase of sentiment on the other, attains each its freest development.

The first of these three fundamental phases of Sensibility, let us repeat, unfolds through the automatic and reflex processes in the normal sensuous life. The second unfolds through the willing self-adjustment of the Individual to the institutional world. The third is realized in consciousness first of all through the intellectual apprehension of the essentially abiding character of the World, both in its physical and in its spiritual aspect. And when real Happiness arises as consisting in the clear sense of more or less fully realized harmony between the Individual life and the eternal or divine World as his ultimate and absolutely adequate environment, then Sensibility has attained its most adequate typical character, and can thereafter develop only in degree. Nor is it to be forgotten that the germinal aspects of all these phases are present in interfusion in the very beginning of the individual life, and that the explicit unfolding of the

one is later than that of the other, merely because of the greater complexity in nature of the one over that of the other.

It is further to be noted that the more complex phases of Sensibility, like the more complex phases of the other fundamental modes of mind, depend for their development upon harmony of relations as between the Individual and his environment.

And yet the very *Ideal* of harmony as between the Individual and his Environment in all its degrees necessarily implies that the harmony is to be *realized*. Otherwise the sentiment must be that of *unhappiness* as the subjective aspect of dissonance between the Individual and the contemplated perfect World. Hence a completed view of the mind necessarily includes the consideration of a further mode—the mode by which actual practical self-adjustment to the Environment in its fullest significance is to be accomplished. This mode of Mind is known as the *Will*. And to this we have next to turn our attention.

V. WILL.

If Sensibility is characteristically the passive aspect of mind, Will is no less characteristically its active aspect. It is especially as Sensibility that the mind is said to be “susceptible,” “impressible,” “responsive.” But this *passivity* of the mind is only another name for its *receptivity*; and receptivity, in its fuller import, is *reaction*.

Now, this tendency to respond, to *react*, upon any and every stimulus, of whatever character, from the environment, is precisely that "practical," that "active," phase of mind which in actual exercise is known as Will. Whence it appears that the relation between Sensibility and Will, just as that between Sensibility and Intelligence, is one of interdependence and mutual interfusion. On every hand the absolute unity of Mind is emphasized.

Thus in its widest significance Will may be defined as the mind, considered as a *Power-to-do*; just as the Intellect may be defined as the mind considered as a *Power-to-know*, and just as Sensibility may be defined as the mind considered as a *Power-to-feel*.

Like the other phases of mind, Will has its initial aspect in the sensuous degree of life. Here it is involved in organic functions and in the structural forms expressive of those functions. Just as the sensory nerves and the cerebral centers constitute the organic media of Intellect and of Sensibility; so the motor nerves with the spinal cord and certain cerebral centers, along with the whole system of voluntary muscles, constitute the organic aspect of the Will.

Here, indeed, the truth, already so often insisted upon, becomes specially conspicuous—the truth, namely, that the *whole mind* requires a *whole organ*, which organ is in reality the entire body. And yet it is not to be forgotten that development means *differentiation*—the specialization of structural form

to correspond with, as the organic expression of, progressively specialized functional activity. Nor is this anywhere more to be emphasized than in the development of the mind as Will. Here, also, we have to consider Mind (1) in its hereditary or physiological relations; (2) in its social or institutional relations, and (3) in its cosmic relations.

The phase of the Will developed through the first of these groups of relations is known as *Instinct*; the phase developed through the second group is known as *Habit*; the phase unfolded through the third may properly be called *Freedom*.

A. THE WILL AS INSTINCT. This organic aspect of Will is seen above all in the lower orders of animals and in children. Doubtless the most rudimentary degree of Will is shown in the form of that "contractility," which with its complementary phase of "irritability" as a premonition of feeling and intelligence, specially characterizes the simple unicellular animal. And whatever judgment may be passed upon the "psychic life of micro-organisms" it is beyond question that biological science has done most important service in furnishing clues to the solution of hitherto very obscure "problems of life and mind;" and this no less in respect of the Will than of Intelligence and of Sensibility.

The Will can no longer be exclusively restricted to the explicitly conscious phases of life. In its character of mind considered as a Power-to-do it appears

first of all in "unconscious" organic activity. Here it is especially conspicuous under the form of *Reflex action*. The Individual reacts upon the environment in this or that manner, not from any conscious purpose of his own, but rather because in his spinal cord exist in organic fusion the cumulative results of the volitions, conscious and unconscious, of the Race as his collective ancestor. Thus far he is simply and literally a "creature of instinct;" that is, of inherited tendencies.

In this sphere movements take place in a "purposeful" way indeed; but the "purpose" is present only in the organic structure of the animal; not as a mode of its individualized consciousness. Nor can this "purpose" really be accounted for save as a specialized organic manifestation of that all-inclusive *Purpose* which constitutes the ultimate, unalterable *Method of Creation* and which is seen everywhere to lead up from simpler to more complex forms; from not-living to living structures; from unconscious to conscious units. (This is the metaphysical presupposition underlying all modern science, especially the biological sciences, and above all manifest in modern Psychology in which those sciences find their culmination. It is, in fact, just this presupposition which constitutes the central element of vitality in these sciences.)

But, as the product of Heredity, it is evident that this phase of the Will of the Individual is absolutely *pre-determined*. His acts are *not his own*. An incalcu-

lable complex of forces have converged and fused into a living mechanism which *seems*, indeed, to act from that higher spontaneity consisting of conscious purpose; but which, *in reality*, acts only from that lower spontaneity consisting merely of simple mechanical reaction upon this or that given physical stimulus. It is not *free* will, but will absolutely *predestined*.

And yet, so far as responses to stimuli coming from the environment are such as to extend and intensify the harmony between the individual and his environment, there is increase of Life, of vigor, of unhindered rhythmic activity—growth in physical power and grace—development of what may be termed *physical and physiological freedom* on the part of the individual. His relations to his environment are such that everything contributes to the furtherance of his life. Every contact with the World renews his strength. It is in his rhythmic relation to the rational World that man, both physical and spiritual, is the true Antæos.

Nor must it be overlooked that in its concrete development the rudimentary phase of Will is completely interfused with Perception on the one hand and with the sense of the agreeable or the reverse on the other. At the same time the tendency will be to repeat those acts which involve a sense of the agreeable and to avoid those which involve a sense of the disagreeable. So that already in Instinct there are

involved conditions tending to a *choice* as between actions of one and those of another character with respect to the individual life. Such choice, carried out, results in more or less definitely fixed tendencies on the part of the individual; and such tendencies are known as *Habits*. It is this aspect of Will that we have next to bring under notice.

B. THE WILL AS HABIT. As the result of heredity Instinct is individualized Will only in the sense of an organically realized tendency to repeat the general course of actions of one's ancestors. And yet because this tendency is the compound product of the activity of *all* one's ancestors, the instinct of the individual can never suffice to bring him into complete harmony with his environment; which, besides, is itself constantly undergoing change and hence is in greater or less degree different from that of any of his ancestors.

Hence, while from his organic nature the Individual of course responds to stimuli from his environment, such responses can not but be imperfect. So that from the first there is inevitable more or less dissonance in the experience of the Individual in consequence of the more or less pronounced collisions taking place between himself and his environment through his imperfect responses to the stimuli he receives therefrom.

Such dissonance in the experience of the individual constitutes *pain*; and the result of pain is to stimulate the intelligence to inquiry as to the *cause* of the pain. This discovered there is (in the normal life)

conscious, purposive effort toward more perfect self-adjustment to the environment—a process which, traced back to its least adequate degree, is doubtless unconscious, though in every phase, from the simplest to the most complex, still *purposive*; expressive, *i. e.*, of the Intelligence inherent in the total creative Process. (Rightly understood “Heredity,” especially in respect of man’s intellectual and moral nature, necessarily implies the fullest degree of actual spiritual qualities on the part of his “ancestry.” But this points clearly to the necessity of including in our estimate of Man’s ancestry that ultimate self-knowing Energy, which is, in truth, the indispensable presupposition of that wonderful Method of Creation, constituting what, in its concrete aspect, is known as the Process of Evolution. So that all the more direct forms of Heredity, commonly recognized as such, are really to be regarded as but special aspects of the whole process by which Man, as a conscious unit of Energy, realizes his descent from, as well as his ascent to, the ultimate creative Personal Energy. Only from this latter can Man really “inherit” the qualities which constitute his essential nature as Man. Such metaphysical note is quite indispensable to the proper comprehension of the human mind as the real subject of Psychology.)

It is thus that *individualized* acts come to be performed; and as such conscious, purposive acts come to be multiplied in some one given direction a new

tendency is developed in the individual mind (and hence, also, in the organism embodying such mind).

Such are the tendencies which, arising directly, as they do, from the individualized actions of a given individual unit (here considered as human) are properly termed *Habits*.

Those habits expressive of and tending to emphasize the substantial adjustment of the Individual to the environment in its rational and permanent character are for that reason the habits tending to prolong, extend and enrich the life of the Individual. Hence, they are called *good* habits. On the other hand, those habits expressive of and tending to emphasize dissonance as between the individual and his environment are for that reason habits tending to impoverish and ultimately to destroy the life of the Individual. Hence, they are properly called *bad* habits.

The extreme degree of the complexity of the environment in respect of the Will considered as Habit can only be hinted at here. Besides the merely physical aspect (in which Instinct still plays an important part) there is the whole range of the *social* environment—the institutional world—in which *custom*, as the organic form of the communal Will, is the dominant feature. It is progressive adjustment to this as the most immediate concrete aspect of the spiritual environment that constitutes the unfolding of the will as Habit in the higher sense of the term.

But here again the environment itself undergoes change—is imperfect and must (normally) advance to more complex and more rhythmic forms. Further, the advancement of the Individual is the advancement of the Race, which again constitutes the more complex aspect of the environment of the Individual. From which the difficulties in the way of the Individual's self-adjustment to his environment may be measurably appreciated.

And not only so but because Custom, as the organic form of the communal Will, is in reality the cumulative result of the life of the Race, and because the development of the Individual's will considered as Habit is practically limited to the custom of his time, it would seem that here, too, the form and possible extent of the actual development of the individual Will is predetermined; that in this sphere also the Individual is essentially a creature of *pre-destination*.

And yet the more complete the Individual's self-adjustment to the social environment (in its rational character) the more evidently will there be for him increase of Life, of vigor, of easy, rhythmic activity—growth in intellectual and moral power and grace—development of what may be called *social or ethical freedom* on the part of the Individual.

The negative aspect of such Freedom is the *absence of hindrance*. Its positive aspect is the *sense*

of Power. Here, too, every rational contact with the World in its rational character adds to the realized power of the Individual. In organic relation with the source of life his own life constantly expands.

Let us note, besides, that *self-activity* is the central characteristic of every living unit. And in man, as the highest order of living units, self-activity attains in ever greater degree the character of conscious, deliberate self-direction—*i. e.*, the character of that genuine spontaneity which may properly be called *Freedom*.

In this whole sphere there is the most complex interaction between *Habit* as the active phase of mind and the sentiment of *Contentment* as the specially passive phase of mind, mediated by *Imagination* as (in this sphere) the corresponding phase of Intelligence considered as the contemplative or regulative phase of mind.

The Will as habit is directly involved in the whole sphere of intellectual development. "Habits of study" are "intellectual" habits, indeed. But this means nothing else than that in all intellectual activity there is necessarily implied *choice* both of subject-matter and of method. And "choice" is nothing else than the subjective aspect of that "Spontaneity" which is manifested outwardly or objectively in definite acts of *Will*. The complete interfusion of Intellect and Will, the absolutely indivisible unity of Mind, is here again emphasized in the highest degree.

C. THE WILL AS FREEDOM. In its instinctive phase Will is simply organic and unconscious. In the phase of Habit it is conscious, but not yet critically reflective. With widened experience situations arise which stimulate the Intelligence to deliberately question the whole order of the World. The sense of inevitable, irrepressible dissonance as between the individual and his environment can not be allayed save through the discovery (1) of the ultimate nature both of the Individual and of his environment, and (2) of the true means and method of final adjustment of the former to the latter.

It is this impulse that gives rise to all science, whether of the natural or of the spiritual world. Science itself, is, indeed, the intellectual self-adjustment of man to his environment and as such already involves Will. (*Attention* is no less volitional than intellectual. And it is, of course, only through attention that any single step in the sphere of science can be taken). And further, as Science progresses so does the more thorough-going *practical* self-adjustment of man to the environment advance in complexity and precision.

On the physical side this is illustrated by the whole course of Invention. On the spiritual side it is illustrated by the progressive development of "*self-command*," which is the conscious subordination of present, but momentary, "real" values to ultimate and permanent ideal values.

This involves the discovery of the ultimate Laws of the spiritual aspect of the World—the discovery, that is, of their permanence, their comprehensive nature, their consistency as a total System. Further than this it involves the recognition of the fact that self-adjustment to this System on the part of the Individual has for its necessary logical consequence the extending and enriching of his spiritual life, while neglect of such self-adjustment to—still more antagonism with—this System must result no less inevitably in narrowed and impoverished spiritual life on his part.

Here the real truth of the Socratic doctrine that “Virtue is knowledge,” and that thus “no man will do wrong knowingly,” comes clearly to light. For he who really *knows* all the consequences of an evil deed, the remote as well as the immediate, will never commit that deed.

In this higher sphere, then, Freedom is *expressed in* deliberate conformity to the divine Law of Reason; while it *consists of* that growing Power-to-do (or to refrain from doing) which is the inevitable result of unison between the individual life and the ultimate spiritual order of the World. In other words, Freedom is *conscious conformity to Reason*. Or, it is the adjustment of one’s life to the ultimate order of the *Cosmos*—the Eternal World.

Evidently, then, while the Will as Instinct is the product of the deeds of one’s ancestors and is thus wholly predestined, yet at the same time the Will as

Habit, and still more in its higher degree of conscious, reflective Will, is the cumulative product of *one's own individualized deeds* and constitutes the positive, active phase of that total of individual character which can not but become intensified and enriched in its very Individuality with each additional phase of positive, rhythmic relation that comes to be realized between itself and the ultimate, rational World-order which in its very nature is the source of all Life. In harmony with the World the World as a whole proves organic to one's Life. In antagonism with the World the World in just that far proves alien and inimical to one's Life.

Such is the clew to the tracing out of what constitutes genuine, concrete *Freedom* as characterizing true spiritual Individuality in its highest sense of *Personality*. And here, evidently, as complementary to this highest phase of Will, considered as the active aspect of Mind, there is involved *Thought* as the highest phase of Intelligence considered as the contemplative aspect of Mind, while the sense of growing unison between the contemplated Ideal on the one hand and the actual Life of the Individual on the other appears in the character of *Happiness* as the highest phase of Sensibility, considered as the passive aspect of mind.

Initially predestined the Individual may, nevertheless, attain Freedom. But this again is a process of Evolution. The *type* is infinite; the *actual realiza-*

tion in and for the Individual must ever remain finite. Freedom is attainable, yet never wholly attained. No man ever was or could be *born* free. Only through *obedience*, only through persistent, progressive self-adjustment of the individual Life to the established order of the world in its changeless character can such Life be extended and enriched to a degree of realized individual Power worthy of being even remotely designated as Freedom.

And yet the very infinitude of the Type gives assurance of infinite perfectibility for the individual human mind whether considered as a Power-to-know, or as a Power-to-feel, or as a Power-to-do. The realization of human Personality is to be attained only through an infinitely extended evolutionary process, consisting of ceaseless approximation to that perfect Personality which is self-expressed in the total Cosmic Order.

We have thus traced in brief outline the typical nature of mind considered as an individual unit of Energy. But this very tracing out of the essential characteristics of the type or Ideal of Mind in its individual *and personal* nature must inevitably raise the question: Through what means and by what method is this type or Ideal to be unfolded into reality in and for the Individual?

The more immediate answer to this question constitutes a further science—the science of *Ethics*.

SUPPLEMENTARY NOTES TO SECOND EDITION.

1. By carefully noting *as a whole* what is said of *Perception* (pp. 14-16), the reader will avoid confusing the "image" on the retina with the "image" constituting the objective aspect of the Percept. This caution is the more necessary since the beginner in psychology can scarcely be expected to appreciate the importance of the distinction.

2. On p. 56, it is by no means intended to say that Virtue consists in knowledge alone. The reader is to keep in view the organic unity of the mind as at once a Power-to-know, a Power-to-feel and a Power-to-do. Every act of the mind involves the *whole* mind—a fact emphasized throughout the Syllabus. Virtue is wise, but is *real* Virtue only in so far as it is *wise-action*. Even so it is virtue in the truest sense only in so far as it is *wise-action gladly performed*. It is this joyous devotion-in-action to the Cosmic Order, in its ultimate character of Personal Creator, that constitutes the Love which is the "fulfilling of the Law."

3. Here, indeed, we are not merely trenching upon the field of Ethics; we are even crossing the line where Morality merges into Religion. And this emphasizes a third point. The ethical aspect of Life would seem to require that in any outline, however meager, of Psychology, some reference to *Conscience* ought to be found. Upon this point I offer here only the following brief intimation: Conscience is not a "faculty" of the mind. It is not an aspect of Intelligence merely, nor of Sensibility merely, nor of Will merely. It is rather a central quality or characteristic of the mind as a whole. It is the *practical aspect of Consciousness*. Knowledge, as the product of intellectual activity, may be said to be Virtue in the abstract, and capable of becoming Virtue in

the concrete only through the coincidence of Will with Intelligence.¹ Similarly Consciousness in the narrower sense is mere intellectual apprehension of the conditions of Life, while Conscience is Consciousness raised to the power of *conviction* that the *normal* conditions of Life must be actually complied with, in one's own experience, if one would avoid Death and attain actual Life. Hence, what Consciousness (in its predominantly intellectual aspect) is to Psychology, that Conscience is to Ethics, as the science which has for its central purpose to discover and appraise the means and the method by which the Type or Ideal of Personality unfolded in Psychology is to be brought into realization in and for the Individual human mind. It appears, then, that just as the science of Psychology begins naturally with a consideration of Consciousness in general and proceeds by analysis to unfold its various aspects from simple sensation to the most complex forms of deliberative Will, so the science of Ethics must find its normal beginning in the study of Conscience and proceed from this to unfold the various specific forms in which human action progressively gives to Conscience its concrete realization.

These notes are in response to friendly suggestions made by *Dr. B. F. Hayes*, of Bates College, and by the reviewer of the Syllabus, in the *New York Independent*.

1. Cp. above, p. 54 and elsewhere.

The following list of Hand and Reference books on Psychology was prepared directly in answer to a request for such list made by a group of people entering upon a systematic study of the subject.

As the request comes just while the foregoing Syllabus is passing through the press it has occurred to me that to append the list here may very likely prove a convenience to those private students into whose hands the Syllabus may chance to fall. My choice of works has been, not merely with reference to their intrinsic value, but also with a view to their mutually corrective and supplementary character.

I. HANDBOOKS.

1. *Hoefding, Harald*, Outlines of Psychology.
2. *Sully, J.*, Outlines of Psychology.
3. *Bain, A.*, Mental Science.
4. *Dewey, J.*, Psychology (Text-book).
5. *Lotze, H.*, Psychology (Brief Sketch).
6. *Aristotle*, Psychology (Text and Translation by E. Wallace).
7. *Volkman, W.*, Lehrbuch der Psychologie. (3rd Ed., 2 Vols.)

II. SPECIAL WORKS.

8. *Romanes, G. J.*, Mental Evolution in Animals.
9. *Romanes, G. J.*, Mental Evolution in Man.
10. *Preyer, W.*, The Mind of the Child.
 - Part I. The Senses and the Will.
 - Part II. The Development of the Intellect.
11. *Mueller, Max*, Science of Thought. (2 Vols.)
12. *Sully, J.*, Sensation and Intuition.
13. *Sully, J.*, Illusions.
14. *Ribot, T.*, Select Works (Humboldt Library), incl. "Diseases of the Memory," "Diseases of the Will" and "Diseases of Personality."

15. *Colsenet, E.*, La Vie Inconsciente de L'Esprit (based on Hartmann's Philosophy of the Unconscious).

16. *Moll, A.*, Hypnotism. (Cont. Science Series.)

III. WORKS EMPHASIZING GENERAL PRINCIPLES.

17. *Lotze, H.*, Microcosmus (Especially Books II and V).

18. *Schopenhauer, A.*, The World as Will and as Representation (Especially Books II, III and IV).

19. *Spencer, H.*, Principles of Psychology. (2 Vols.)

20. *Lewes, G. H.*, Problems of Life and Mind (Especially Series. III).

21. *Taine, H.*, On Intelligence.

22. *James, W.*, Principles of Psychology.

23. *Hume, Works.* (Ed. by T. H. Green.)

24. *Hegel, G. W. F.*, Philosophie des Geistes. (French version, with copious notes, by Vera.)

25. *Fichte, J. G.*, The Science of Knowledge.

26. *Plassmann, H. E.*, Die Psychologie auf Grundlage der Physik, gemäss der Schule des h. Thomas. (Modern Catholic standpoint.)

IV. WORKS ON PHYSIOLOGICAL PSYCHOLOGY.

27. *Ladd, G. T.*, Outlines of Physiological Psychology. (An excellent résumé of the subject.)

28. *Bastian, H. C.*, The Brain as an Organ of Mind.

29. *Carpenter, W. B.*, Mental Physiology.

30. *Wundt, W.*, Grundzüge der Physiologischen Psychologie. (In the 3d Ed., 2 Vols., this is still the great work on the subject.)



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